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PCV113
RACIAL VARIATIONS IN ANTIHYPERTENSIVE PHARMACOTHERAPY IN AMBULATORY SETTINGS: DATA FROM UNITED STATES NATIONAL SAMPLES
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OBJECTIVES: Very few studies systematically investigated the differences in antihypertensive pharmacotherapy in ambulatory care settings among different racial groups. The objectives of the study include: 1) To compare antihypertensive prescription patterns by patient race in US ambulatory settings; 2) To determine factors affecting the recipient of each class of anti-antihypertensive regimen specific to racial groups. **METHODS:** All patient-physician encounters with primary diagnosis indicating essential hypertension (ICD-9 codes "401.0", "401.1" and "401.9") and patient age 18 years and older from National Ambulatory Medical Care Survey (NAMCS) for the years 2006-2010 were analyzed. Weighted univariate and bivariate analyses were performed to examine demographics and clinical characteristics in general and between the racial/ethnic groups. Multivariate logistic regression models were performed to investigate the adjusted likelihood of receiving each class of antihypertensive regimens by different racial groups, controlling for potential confounders. **RESULTS:** A total of 12,674 visits were identified. The unadjusted prescription rates by race (African Americans vs. Caucasians) were 23.1% vs. 20.3% (diuretics), 21.9% vs. 29.5% (BBs), 21.2% vs. 26.5% (ACEIs), 18.5% vs. 16.7% (CCBs), 14.5% vs. 14.8% (Angiotensin II Receptor Blockers, ARBs), 6.6% vs. 5.9% (Antiadrenergic agents), and 47.2% vs. 45.2% (combination regimens). Weighted logistic regression analyses determined that African Americans were more likely to receive diuretics (*OR=1.396, P<.0001*), Calcium Channel Blockers (BBs) (*OR=1.409, P<0.0001*), Anti-Adrenergic-agents (*OR=1.267, P=0.0275*), fixed-dose combinations (*OR=1.273, P=0.0027*), and multiple-pill-regimens (*OR=1.184, P=0.0048*) and less likely to receive ACEIs (*OR=0.836, P=0.0080*), BBs (*OR=0.73, P<0.0001*) than Caucasians. Factors affecting the likelihood of receiving different classes of antihypertensive agents include patient age, gender, co-morbid conditions, insurance-status, and health education profile. **CONCLUSIONS:** In US Ambulatory Care Settings, African American patients receive systematically different antihypertensive regimens than their Caucasian counterparts. Further studies are needed to disentangle the potential effects from health insurance and utilization patterns on the racial variations in antihypertensive pharmacotherapy.

PCV114
STATIN DOSING PATTERNS AND LIPID LEVELS AMONG PATIENTS WITH HIGH-RISK VASCULAR DISEASE
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OBJECTIVES: Assess statin dosing patterns and lipid levels among UK high-risk vascular disease (HRVD) patients. **METHODS:** Patients with HRVD, including acute coronary syndrome (ACS), cerebrovascular arterial disease, peripheral arterial disease, and diabetes with coronary artery disease (CAD), 4/1/2008–3/31/2011, were identified from the Clinical Practice Research Datalink with Hospital Episode Statistics data. Statin doses were assessed from the first prescription on/after the index date (date of diagnosis of cerebrovascular, peripheral, or CAD or 30 days after ACS hospital discharge). Use of high-intensity statin therapy (atorvastatin 40–80 mg or rosuvastatin 20–40 mg) was examined. Across 2 years of follow-up, upward-dose titration was noted. Lipid levels were examined for high-intensity and non-high-intensity statin users and non-users. **RESULTS:** Of 63,549 statin users with HRVD and ≥6 months' follow-up, most (69.6%) received simvastatin; also prescribed were atorvastatin (23.3%), pravastatin (3.6%), rosuvastatin (3.2%), and fluvastatin (0.4%). The most frequent initial drug-dose combinations were simvastatin 40 mg (48.5%) and 20 mg (15.5%) and atorvastatin 40 mg (8.2%) and 80 mg (5.4%). Upward-dose titrations occurred in 8.9% of patients in 2 years. High-intensity statin use across 2 years was 16.4% overall and highest in ACS (28.9%) relative to other HRVD conditions (range 8.8%–20.9%). Among patients with ≥1 low-density lipoprotein cholesterol (LDL-C) record in 2 years, 41.3%, 35.5%, and 5.3% of patients on high-intensity, non-high-intensity, and no statin had LDL-C <1.8 mmol/L. Similar patterns were seen with total cholesterol, but high-density lipoprotein cholesterol (HDL-C) >1.2 mmol/L was observed in 46.3%, 54.9%, and 66.1% of high-intensity users, non-high-intensity users, and non-users, respectively. **CONCLUSIONS:** Simvastatin 20–40 mg or atorvastatin 40–80 mg were most frequently prescribed for HRVD patients. Upward-dose titration was seldom seen. Statin use, especially at high intensity, was associated with lower LDL-C, although statin use was not associated with higher HDL-C.

PCV115
TREATMENT PATTERNS WITH LIPID-ALTERING DRUGS IN HIGH-RISK VASCULAR DISEASE IN THE UNITED KINGDOM
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OBJECTIVES: Examine lipid-altering drug use patterns, statin adherence, and persistence among patients with high-risk vascular disease (HRVD) in the United Kingdom (UK). **METHODS:** Patients with HRVD, including a history of acute coronary syndrome (ACS; >30 days–365 days after discharge for ACS), cerebrovascular arterial disease, peripheral arterial disease, or diabetes with coronary artery disease, 4/1/200–3/31/2011, with a minimum of 12-month continuous enrollment before the index date were identified using the Clinical Practice Research Datalink with Hospital Episode Statistics data. The date of the first HRVD diagnosis satisfying the above inclusion criteria was defined as the index date. Use of lipid-altering drugs was measured during the 6-, 12-, and 24-month follow-up periods. Statin adherence (medication possession ratio [MPR]), was obtained for 6, 12, and 24 months after the index date. Statin persistence was estimated as the time from earliest statin use on or after the index date until the last date of exposure prior to a gap of ≥30 days. **RESULTS:** Of 119,267 HRVD patients with ≥6-month follow-up, 59.8% of patients used statin monotherapy, 3.3% used statin combination therapy (i.e., statin plus ezetimibe, niacin, fibrates, or bile acid sequestrants), and 35.3% had no recorded lipid-altering therapy. The usage patterns of statins and other lipid-altering drugs changed little during the rest of the 24-month follow-up period. The mean/median MPR during the 6-, 12-, and 24-month follow-up periods was 0.88/0.97, 0.85/0.96, and 0.82/0.94, respectively, among HRVD patients who used a statin with 76.9%, 74.8%, and 71.3% of patients adherent (MPR≥80%) to their statin therapy. Median time to discontinuation of the index statin was 523 days during the 24-month follow-up period. **CONCLUSIONS:** Close to two-thirds of HRVD patients used statin or other lipid-altering drugs during the 24-month follow-up period. Statin adherence and persistence were high among patients with HRVD in the UK.

PCV116
HYPERTENSION MANAGEMENT IN OUTPATIENT VISITS BY DIABETIC PATIENTS
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OBJECTIVES: Treatment with Angiotensin converting enzyme (ACE) inhibitors or angiotensin receptor blockers (ARBs) forms the first line of therapy in hypertensive diabetic patients. This study examined the factors associated with prescribing of ACE inhibitors/ARBs in nationally representative outpatient visits by hypertensive diabetic patients. **METHODS:** The 2010 National Ambulatory Medical Care Survey (NAMCS) and outpatient department of National Hospital Ambulatory Medical Care Survey (NHAMCS) database were used to conduct a retrospective cross-sectional study on visits by hypertensive diabetic patients (age ≥18 years). Bivariate chi square analysis and multivariable logistic regression were performed to evaluate the factors associated with prescribing of ACE inhibitors/ARBs. **RESULTS:** A total of 59.47 million outpatient visits were made by diabetic patients in 2010. Of these, 42% visits were made by patients with both diabetes and hypertension. Controlled blood pressure (≤130/ 80 mmHg) was found in 44% (95% CI: 39-47) of the total hypertensive diabetic visits. ACE inhibitors/ARBs were prescribed in 51% or 12.28 million (95% CI: 8.9- 15.61) hypertensive diabetic visits. Enalapril and Lisinopril were the most prescribed ACE inhibitors; Losartan and Valsartan were the most prescribed ARBs. After controlling for various factors, multivariable logistic regression analysis showed that males were more likely to be prescribed ACE inhibitors/ARBs as compared to females (Odds Ratio, OR 1.63, 95% CI: 1.01-2.62). Patients living in the Northeast were more likely to receive ACE inhibitors/ARBs as compared to those in the Midwest (OR 2.67, 95% CI: 1.40-5.13). **CONCLUSIONS:** Hypertension management was suboptimal among hypertensive diabetic patients. Recommended first line of treatment, ACE inhibitors/ARBs were prescribed in over half of the outpatient visits. The study also found variation in use of ACE inhibitors/ARBs across gender and region. Future studies should examine factors related to gender disparities and regional variation in use of ACE inhibitors/ARBs in hypertensive diabetic patients.

PCV117
IMPACT OF PATIENT CHARACTERISTICS ON SOURCE OF INPATIENT ADMISSION FOR HEART SURGERIES
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OBJECTIVES: Diseases of the heart pose an extreme burden on health care resources in the United States. Inpatient admissions originating from the emergency room increase the burden on health care resources and may be indicative of disparities in access to care. This study looked at the effect of patient characteristics on the source of inpatient admission for 3 types of heart surgeries. **METHODS:** This study used data from the 2011 Medical Expenditure Panel Survey. Logistic regression models were used to estimate associations between patient characteristics and source of inpatient admissions for coronary-artery bypass, pacemaker implant and valve surgeries. The models were adjusted for comorbidities and the level of significance was set at 95% CI. **RESULTS:** There were 24 and 57 patients undergoing coronary-artery bypass and pacemaker implant surgeries, respectively. Of these 11 coronary-artery bypasses and 12 pacemaker implants were admissions originating from the emergency room. No valve surgeries originated from the emergency room. Male patients of age 55 to 70 years with middle school education and having no insurance had higher odds for having an inpatient admission originating from the emergency room for coronary-artery bypass surgery (OR 1.23, CI 0.70- 0.85; OR: 1.56, CI 1.12-2.19; OR 5.91, CI 1.32-26.32; OR 1.30, CI 0.64-0.77), when compared with those with elective admissions for the procedure. The effects were similar for non-elective pacemaker implants. **CONCLUSIONS:** Literature suggests that there are associations between non-elective surgical events and inpatient admissions through the emergency room. This study found that patient characteristics have an influence on the source of admission for inpatient heart surgeries. The demographic profile of patients at risk for heart surgeries originating from the emergency room is suggestive of existent disparities in terms of age, education, gender and insurance status in the population sample. More research should explore whether this translates into other health care services.

PCV118
USE OF A BLOOD-BASED GENE EXPRESSION SCORE WAS ASSOCIATED WITH LOWER DIAGNOSTIC TESTING COSTS IN PATIENTS PRESENTING TO THE CARDIOLOGIST WITH SYMPTOMS SUGGESTIVE OF OBSTRUCTIVE CORONARY ARTERY DISEASE: AN ECONOMIC ANALYSIS OF THE IMPACT-CARD (INVESTIGATION OF A MOLECULAR PERSONALIZED CORONARY GENE EXPRESSION TEST ON CARDIOLOGY PRACTICE PATTERN) TRIAL
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OBJECTIVES: In the United States, patients presenting to physicians' offices with chest pain and related symptoms frequently undergo extensive non-invasive and